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DATE MAILED: 10/20/2008

NOTICE OF ALLOWANCE AND FEE(S) DUE

25227 7590 1020/2008 MORRISON & FOERSTER LLP 1650 TYSONS BOULEVARD SUITE 400 MCI FAN VA 22102

EXAMINER						
HITESHEW, FELISA CARLA						
ART UNIT	PAPER NUMBER					
1792	•					

Γ	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
	10/537,804	06/07/2005	Robert Dwilinski	204552035400	6610

TITLE OF INVENTION: PROCESS FOR OBTAINING BULK MONO-CRYSTALLINE GALLIUM-CONTAINING NITRIDE

APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	01/20/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT, PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

appropriate. All further indicated unless corrects maintenance fee notifica	correspondence includir ed below or directed oth	ng the Patent, advance on herwise in Block 1, by (a	rders and notification of a a) specifying a new corre	maintenance fees w spondence address;	ill be and/or	mailed to the current (b) indicating a sepa	correspondence address a arate "FEE ADDRESS" fo
	ENCE ADDRESS (Note: Use Bi	ock 1 for any change of address)	pap	ers. Each additiona	paper	can only be used for icate cannot be used for such as an assignment ling or transmission.	or domestic mailings of the for any other accompanying ent or formal drawing, mus
1650 TYSONS I SUITE 400			I be	Cer	tificate	of Mailing or Trans	mission g deposited with the United st class mail in an envelope above, or being facsimile ate indicated below.
MCLEAN, VA	22102						(Depositor's name)
			_				(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
10/537,804 TITLE OF INVENTION	06/07/2005 T: PROCESS FOR OBTA	AINING BULK MONO-C	Robert Dwilinski CRYSTALLINE GALLIU	M-CONTAINING		204552035400 IDE	6610
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nonprovisional	NO	\$1510	\$300	\$0		\$1810	01/20/2009
EXAM	IINER	ART UNIT	CLASS-SUBCLASS	1			
HITESHEW, FI	ELISA CARLA	1792	117-011000	•			
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 12 or more recent) attach ND RESIDENCE DATZ less an assignce is ident h in 37 CFR 3.II. Comp	nge of Correspondence "Indication form ed. Use of a Customer A TO BE PRINTED ON	2. For printing on the p (I) the names of up to or agents OR, alternati (2) the name of a sing registered attorney or 2 registered patent atte listed, no name will be THE PATENT (print or ty data will appear on the p T a substitute for filing an (B) RESIDENCE: (CITY)	o 3 registered paten vely, le firm (having as a agent) and the nam meys or agents. If printed. pe)	memb es of u no nam	er a 2	ocument has been filed for
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	s SMALL ENTITY state	is. See 37 CFR 1.27.	b. Applicant is no lon				
interest as shown by the	u rubilication ree (if req records of the United Sta	tes Patent and Trademark	Office.	ше аррисант; а геді	stered a	morney or agent; or th	ne assignee or other party ir
Authorized Signature				Date			
Typed or printed nam				Registration N			
This collection of inform an application. Confiden submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this but (irginia 22313-1450. DC k13-1450.	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the ONOT SEND FEES OR	on is required to obtain or 1.14. This collection is es depending upon the indi- e Chief Information Offic COMPLETED FORMS T	retain a benefit by t timated to take 12 i vidual case. Any co er, U.S. Patent and O THIS ADDRESS	ne publ ninutes mment Traden	ic which is to file (and to complete, includir s on the amount of til ark Office, U.S. Dep D TO: Commissioner	d by the USPTO to process ig gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450

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1650 TYSONS E	OULEVARD		ART UNIT	PAPER NUMBER		
SUITE 400 MCLEAN, VA 2	2102		1792 DATE MAILED: 10/20/200	8		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 605 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 605 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/537.804 DWILINSKI ET AL. Notice of Allowability Examiner Art Unit Felisa C. Hiteshew 1792 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to the amendment filed on 08/22/2008. The allowed claim(s) is/are 2-7,10-12,15,16 and 18-28. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) ☐ Some* c) ☐ None of the: a) 🔯 All 1. A Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. T Examiner's Amendment/Comment Paper No./Mail Date 10/11/05 & 9/19/08 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance

/Felisa C. Hiteshew/ Primary Examiner, Art Unit 1792

of Biological Material

Other .

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DETAILED ACTION

Information Disclosure Statement

The PTOL 1449s of 10/11/2005 and 09/19/2008 have been received, reviewed and considered.

Response to Arguments

 Applicant's arguments, see the remarks, filed 08/22/2008, with respect to claims 1, 2 and 11 have been fully considered and are persuasive. The 35 USC 101 Double Patenting rejection using U.S. Patent No. 7,364,619 (Dwilinski, et al) has been withdrawn.

Allowable Subject Matter

2. Claims 2, 4-7, 10-12, 15-16 and 18-28 are allowed.

The following is an examiner's statement of reasons for allowance: The prior art of record does not teach nor render obvious the instantly claimed invention.

There is no teaching in the art to perform the process that is now claimed. The prior art does not teach forming a polycrystalline gallium-containing nitride feedstock from a metallic gallium feedstock in a supercritical ammonia-containing solvent with addition of a mineralizer, comprising: forming a polycrystalline gallium-containing nitride feedstock from a metallic gallium feedstock placed in a crystallization zone in which at least one seed is placed, suppressing convection and chemical transport between the dissolution zone and the crystallization zone and by reacting the metallic gallium feedstock with a supercritical ammonia-containing solvent; and crystallizing a gallium-containing nitride by gradual dissolution of the polycrystalline gallium-containing nitride feedstock by evoking

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convection and chemical transport and by selective crystallization of galliumcontaining nitride on at least one seed to obtain a bulk-monocrystalline galliumcontaining nitride, as stated in the instant invention. There is no motivation in the art to change the prior art's teaching to arrive at the instantly claimed process.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Felisa Hiteshew whose telephone number is (571) 272-1463. The examiner can normally be reached on Mondays through Thursday from 5:30 AM to 4:00 PM with Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mikhail Kornakov, can be reached on (571) 272-1414. The

fax phone number for the organization where this application or proceeding is assigned is (571) 273-1463.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system. see http://pair-direct.uspto.gov. Should you have questions on access to the Private

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PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197

(toll-free).

/Felisa C. Hiteshew/ Primary Examiner, Art Unit 1792